

---

# A New Species of *Psychotria* Subg. *Heteropsychotria* (Rubiaceae) from the Adolpho Ducke Forest Reserve, Brazil

Charlotte M. Taylor

Missouri Botanical Garden, P.O. Box 299, St. Louis, Missouri 63166, U.S.A.

Marina Thereza V. do A. Campos

Universidade Federal do Acre, Parque Zoobotânico, Caixa Postal 1035, 69908-210,  
Rio Branco, Acre, Brazil

---

**ABSTRACT.** The new species *Psychotria rhombibractea* C. M. Taylor & M. T. Campos, from wet forest in the Adolpho Ducke Forest Reserve, Manaus, Amazonas, Brazil, is here described and illustrated.

**RESUMO.** A nova espécie *Psychotria rhombibractea* C. M. Taylor & M. T. Campos, com ocorrência na florestal tropical úmida, na Reserva Florestal Adolpho Ducke, Manaus, Brazil, é descrita e ilustrada.

During review of the Rubiaceae collected from the Adolpho Ducke Forest Reserve, in Manaus, Brazil, the following undescribed species was encountered.

***Psychotria rhombibractea*** C. M. Taylor & M. T. Campos, sp. nov. TYPE: Brazil. Amazonas: Reserva Florestal Ducke, Manaus–Itacoatiara road, Km 26, 02°53'S, 59°58'W, Floresta de Platô, 28 setembro 1994 (fl), M. J. G. Hopkins, E. da C. Pereira & C. F. da Silva 1483 (holotype, INPA; isotype, MO-5056257). Figure 1.

Haec species a *Psychotria officinali* (Aublet) Sandwith inflorescentiae bracteis ellipticis oblanceolatis vel plerumque rhombicis, corolla ex tubo 9–10 mm longo et lobis 5–8 mm longis constante atque fructus 4–6 × 6–8 mm pyrenis rugosis distinguitur.

Shrubs or small trees to 5 m tall; vegetative organs glabrous. *Leaves* opposite; *blades* elliptic to elliptic-oblong, 7–18 × 2–7 cm, at apex acuminate to rather long-acuminate, at base acute to cuneate, drying papyraceous; secondary veins 6–10 pairs, often uniting into a looping submarginal vein at least in distal part of blade, on both surfaces plane or sometimes prominulous; *petioles* 5–15 cm long; *stipules* persistent, united around the stem into a truncate or concave sheath 0.5–1 mm long, with lobes 2 on each side, deltoid, 0.5–1 mm long, ciliate at least when young. *Inflorescences* terminal,

glabrous to minutely puberulous, with peduncle 8–20 mm long, flowering portion cymose, in outline rounded-corymbiform, 1–1.5 × 2–4 cm (excluding corollas), with secondary axes 1–3 pairs, paired but often appearing subverticillate, generally dichasial, with cymules subtended by bracts, these elliptic, oblanceolate, or usually rhombic, 3–10 mm long, obtuse to acute, white; *flowers* apparently distylous (this state not confirmed with field breeding study), sessile in cymules of 5–7, not individually bracteate; hypanthium (ovary portion) cylindrical to ellipsoid, 0.5–0.8 mm long, glabrous to minutely puberulous; *calyx* limb 0.2–0.5 mm long, minutely puberulous, shortly dentate, entire or ciliolate; *corolla* salverform to narrowly infundibuliform, white, externally and internally glabrous, tube 9–10 mm long, ca. 1 mm diam. near middle, lobes narrowly triangular to narrowly lanceolate, 5–8 mm long, 1–1.5 mm wide, at apex shortly rounded and a little thickened; *stamens* inserted above middle of corolla tube, in short-styled form with anthers ca. 2 mm long exerted on filaments ca. 4 mm long, in long-styled form with anthers ca. 2 mm long, subsessile, these anthers positioned near middle of corolla tube; *stigmas* linear, in short-styled form ca. 2 mm long and positioned near middle of tube, in long-styled form ca. 1 mm long and shortly exerted; disc annular, smooth, slightly exceeding calyx limb. *Infructescences* with bracts becoming purple to wine-red, magenta, red, or orange; *fruits* subglobose, somewhat didymous, 4–6 × 6–8 mm, red or purple-red; pyrenes 2, hemispheric to subglobose, on abaxial (dorsal) surface faintly longitudinally ridged and somewhat rugose throughout, on adaxial (ventral) face planar with a slight central ridge.

This species is known only from the Manaus area, where it has been collected primarily in the Adolpho Ducke Forest Reserve. Here it has been collected with flowers September–November, with

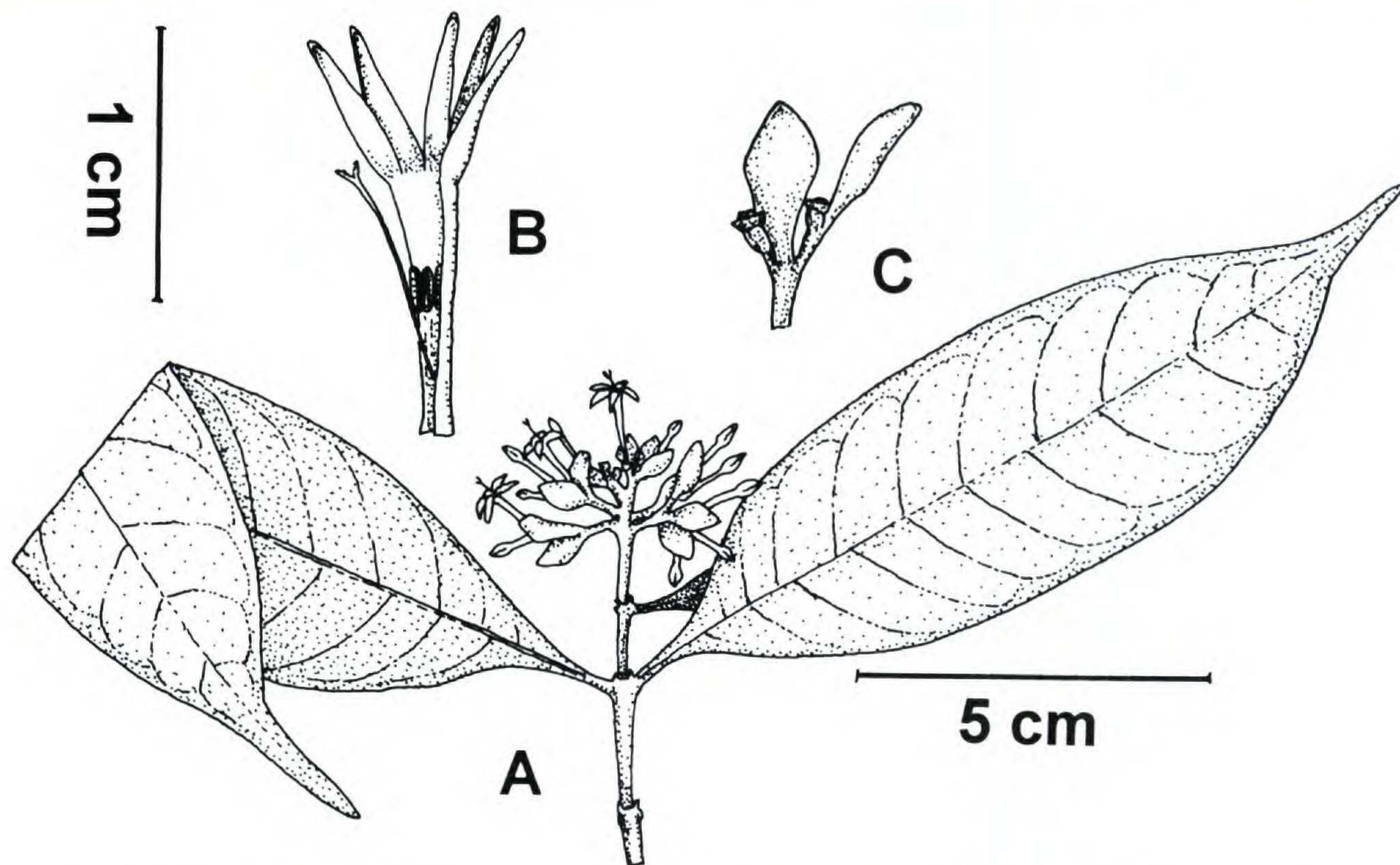


Figure 1. *Psychotria rhombibractea* C. M. Taylor & M. T. Campos, based on Hopkins *et al.* 1483. —A. Flowering branch. —B. Corolla and style of long-styled flower, partially dissected. —C. Cymule with bracts. B, C to 1-cm scale.

fruits February–April, June, and August. The common name is reported to be “mata-calado.”

This new species is similar to *Psychotria officinalis* (Aublet) Sandwith, with which it has been confused; *P. officinalis* can be distinguished by its subulate to triangular bracts 4–7(–13) mm long, vs. elliptic, oblanceolate, or usually rhombic bracts 3–10 mm long in *P. rhombibractea*; corolla with the tube 2.5–3 mm long and lobes ca. 2 mm long, vs. the tube 9–10 mm long and lobes 5–8 mm long in *P. rhombibractea*; disc that is shorter than the calyx limb, vs. longer than the calyx limb in *P. rhombibractea*; and fruits 3 × 3–5 mm, vs. 4–6 × 6–8 mm in *P. rhombibractea*. The specific epithet of *P. rhombibractea* refers to the most common and distinctive form of the inflorescence bracts. The pyrenes of *P. rhombibractea* are relatively large, and their rugose surface is unusual.

*Psychotria rhombibractea* belongs to subgenus *Heteropsychotria* Steyermark, section *Pseudocephaelis* Steyermark (Steyermark, 1972); within this section, it appears to belong to Series B, “Pseudocephaelis.”

**Paratypes.** BRAZIL. Amazonas: Reserva Florestal Ducke, Manaus–Itacoatiara road, Km 26, 02°53'S, 59°58'W, 8 fev. 1996 (fr), Campos *et al.* 461 (INPA), 6 mar. 1996 (fr), Campos & Pereira 536 (INPA, MO), 6 nov.

1961, Rodrigues & Lima 3534 (INPA, NY), 9 jun. 1963 (fr), Rodrigues & Freitas 5322 (INPA, NY), 23 ago. 1994 (fr), Sothers & Silva 124 (INPA, MO); na beira da estrada para a torre, perto da placa de 0.5 km, 29 mar. 1996 (fr), Campos & Silva 586 (INPA, MO); along path, 25 out. 1977 (fr), Keel 189 (NY); próximo a Torre, 18 mar. 1991 (fr), Mota & Santana 3 (INPA, MO); plantio do Pau Rosa na direção Acará, 14 jun. 1994 (fr), Ramos 2826 (INPA, MO); à margem do caminho para o acampamento da Silvicultura, 5 jun. 1963 (fr), Rodrigues 5254 (INPA, NY); perto da estação Meteorológica, abr. 1973 (fr), Rodriguez & Silva 9110 (INPA, MO); trilha a esquerda do Km 0.35 da estrada Alojamento–Torres, 11 mar. 1994 (fr), Vicentini & Silva 418 (INPA, MO); próximo a torre de observação, trilha Torre–Acará, 12 nov. 1993 (fl), Vicentini & Assunção 372 (INPA, MO).

**Acknowledgments.** We thank the Adolpho Ducke Forest Reserve Flora Project and the curators of INPA and NY for access to specimens; the Overseas Development Agency for financial support; Paulo Lopes Assunção and Everaldo Pereira for field assistance; R. E. Gereau for preparation of the Latin diagnosis; and Brian Boom for his counsel and help.

#### Literature Cited

Steyermark, J. A. 1972. *Psychotria*. In: B. M. Maguire & Collaborators, Flora of the Guayana Highlands. Mem. New York Bot. Gard. 23: 406–717.